SBR No. 07/2020-21
DATED 22.05.2020

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR.No.07/20-21
Dt.22/5/2020

No.1st & Final Bill

Date.....2020

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....
Sub Divisional **Job Code :- 006-19-000029** -

Schedule Docket No. Head of Account : P – Code: **P3290** 14th Finance D.R.No.

Name of Work **:- Providing Energy efficent LED street lights and control switches and connected Accessories Dasarahalli areas in Ward no 6.**

.Name of Contractor and Full Address **M/s Mathashree Electricals**

Reference to Agreement No:EE(Elec)WO/000031/ 2019-20 Date:- 09 / 12 /2019

Certified that the measurements were taken by me on 15/4/2020 and recorded of Pages 256HH0 to 256HH2 of measurement Book No. 2565/18-19 and that the work is satisfactorily executed.

C.N. Babu Jekk

Officer-in-charge of work

Contractor

Certified that the measurement were taken by me on 15/4/2020 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer (Ele)
Sub Division Officer
BBMP, Bangalore

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Bill:-	8,40,117=00
2) Deduct amount to be held in reserve being .....percent Rs.....	IT 1%	8401 =00
3) " Balance	NWC 1%	8401 =00
4) Deduct Payment:	CBO 1%	840 =00
a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... Amount adjusted towards cash advance recovery of	Cost 1%	7501 =00
	Cost 1%	7501 =00
b) Payments Now made } cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	deductions:-	32644=00
5) Balance being unpaid value of work done held in reserve.	Charges =	8,07,473=00
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.		
7) Net amount due to or from Contractor unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		
Total amount adjusted -		

Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum
(in final settlement of all demands)

(For use in the Office)

Witness
1.
2.

Stamp

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....Initials of Officer making payme

P3290. 14th Finance grants

ರೂ: 8,40,117=00 ಅಲಿಪ್ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

ರೂ: 8,07,473=00 ನಿಡಬಹುದಾಗಿದೆ

ರೂ: 32,644=00 ಕಾಂಬಾಣಿಕೆ ಹೂಡಿದೆ

ಲೆಕ್ಕ ಅಧೀಕ್ಷಕರು

ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ಪಲಯೆ

Sl. No	Description	Unit
	Name Of Work:-Providing Energy efficent LED street lights and control switches and connected Accessories Dasarahalli areas in Ward no 6.	
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II. LED Streetlight 65watt	Nos
2	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	Nos
3	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps25kA.	Nos
4	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.25 sqmm Long Barrel	Nos
5	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 3.5 core 25 sqmm	Mtrs
6	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. 1. In existing trench/duct. 6 sqmm to 16 sqmm	Mtrs
7	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)50X50X6 mm	Mtrs
8	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Mtrs
9	1.1 KV Pin Insulator	Nos
10	No. 8 Strain Insulator	Nos
11	2 Pin 45x45x5mm -510mm	Nos
12	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.(Make :SANSAM)	Nos
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (Ele)
BBMP, Bangalore

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		1	15000.00	15000.00	1	15000	
		37	2000.00	74000.00	37	74000	
		37	3500.00	129500.00	37	129500	
		97	15.00	1455.00	97	1455	
		371	100.00	37100.00	371	37100	
		371	10.80	4006.80	371	4006.8	
		37	150.00	5550.00	37	5550	
		4991	20.00	99820.00	4991	99820	
		161	35.00	5635.00	161	5635	
		50	10.00	500.00	50	500	
		165	270.00	44550.00	165	44550	
		9	47000.00	423000.00	9	423000	
				840116.80		**840116.80**	